EFFECT OF MEDITATION ON CHAKRA ENERGY: A CORRELATIONAL STUDY WITH RESPECT TO ACADEMICA CHIEVEMENT OF SECONDARY SCHOOL STUDENTS

A
Synopsis
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INTRODUCTION

Present era has brought many mental, physical problems along with many developments for people of all age groups especially children and students. Therefore, all human beings need to develop each and every aspect of life including – the psychological, spiritual and emotional. Now a days meditation is one of the most appreciable method of balance the mind and body connection.

In the present time, the focus of educational institutions is to make students academically sound and active. Their focus is more on training students about the ways through which they can learn more and achieve heights of academic success. Although, there is a provision for games and sports, but that is not enough to bring a complete positive change as the students are not being freed from their fears. Educational institutions lay emphasis on mental training of students only through academic activities, quizzes, discussion, etc. But these activities do not help in providing mental peace to students. Meditation is a proven means for silencing the mind, encouraging mindfulness and providing optimum conditions for generative thinking and reflection (Fisher, 2006). Meditation has been shown to be associated with alterations in the brain structure (Cahn & Poslich, 2006) better mental health (Chines & Serretti, 2009), improved attention (Jha Krompinger & Braime, 2007) greater emotional self-regulation (Goldin& Gross, 2010), slower cellular? (Jacobs et- al., 2011) and better academic performance (Nidich et.al. 2011).

It helps in improving mental strength, building confidence, releasing negative thoughts and behavior. These aspects build a foundation for a healthy mind which leads to improves academic performance in school. schools of meditation have emphasized concern for the condition of others and an intention to "promote an empathy with created things that leads toward oneness with them" (Murphy etal., 1997, p.82). Meditation can be defined as a family of practices that train attention and awareness, usually with the aim of fostering psychological and spiritual well-being and maturity. Meditation does this by training and bringing the mind under greater voluntary control, and directing them it in beneficial ways. The word meditation is derived from the Latin word meditari, meaning "to think"," contemplate", or "derived". Today, meditation has become extremely popular all over the world. In general, it has been used to reduce stress, to promote wellness and healing. Deep meditation stimulates nine key brain regions and hence, harmonic development of children in all aspects such as less stress, more happiness,

more success, deeper sleep, easier learning, better memory, higher IQ & EQ happens. The number of chakras might differ, but they all share a common ground of representing the subtle energy centers of the body.

Regular meditational practices have immense therapeutic value. Beside various psychological benefits, chakra meditation results in peace, happiness, positive thinking, self –confidences, and positive approach to life with emotional stability and strong will power.

Psychological benefits of Om meditation and its benefits as been proven (Kumar, 2009). Om is the name or symbol of God (Ecvara Brahman) described in Kaoha Upaninat (Cinmavananda, 2002). Om covers the whole three folds' experiences of man. It is the combination of three letters, namely: A, U and M. Chakra is a Sanskrit term and it means "wheel" or "disk" and is derived from the root word "cakra". Chakras are spinning wheels of energy / light. Chakras have the responsibility of incorporating and emanating energy to keep us functioning at optimal levels. Throughout the times many have meditated, and their meditation is highly correlated to the chakras inside and outside the body. Meditation is also known as chakra tuning or chakra toning, which is also called chakra energy.

In 1919, chakras were introduced to the western world by the Englishman Artur Avalon in the book "The Serpent Power," a translation of Padaka- Pancaka and Sat-Cakra-Nirupama. In the 10th century Padaka-Pancaka was written with a description of the chakra and their functions.

Gorakshashatakam written with instructions for meditating on the chakras. In 1577 Sat-Cakra – Nirupama was written with descriptions of the chakras and their functions. In 600 AD chakra were described in the Yoga Upanishads (a collection of texts with some of the references of Hindu, Buddhist, Jain beliefs).

In the 1960's interest in Eastem spirituality and healing gained steam in the Western world bringing with it a new and accepting attitude towards the chakra system. Today modern society continues to open up to alternative medicine.

According to Soni. *(2016),* Chakras are the energy centers of our body, located at the midline of our body. There are many chakras present in our body, but the basic seven chakras are the crown chakra, the third eye chakra, the throat, the heart, the solar plexus, the sacral, and the root chakra. Each chakra is associated with different energy levels. The level of chakra energy is changed when a person does

different activities related to their daily routine. These chakras have different energy levels, and by measuring the energy level of these chakras, we can determine the level of consciousness of our body. The openness and flow of energy through our chakras determines our state of health and balance.

These was already mention in synopsis. This study tool is - measurements using the Meridian Energy Analysis Device (MEAD). In the Dayalbagh Educational Institute "Chakra Energy"

Measurement done by Prof. D.K. Chaturvedi- Chatruvedi D.K., Chatruvedi L. (2014) Correlation between energy distribution profile and level of consciousness, Int JEduc.4 (1): 19p. Ming-Yen Tasi, Shih- Yu Chen, Chung-Chun Lin. (2017) Theoretical basis application, reliability and sample size estimates of a Meridian Energy Analysis Devices for Traditional Chinese Medicine Research. Clinics Sao Paulo ;72(4): 254-257.) Yu-Chen Lee, Hui Ping Ng, Yung-Hsien Chang. (2018). The Development and Application Evaluation of Meridian Energy Detection System in Traditional Oriental Medicine: A Preliminary Study.

Through this simple mind – body connection, the chakras have give us a way to balance the whole system. Each of the seven chakras, aligned invisibly up and down the spinal column, stand for an important aspect of being in balance. Starting at the base of the spine working upwards, the information that the chakras can tell about oneself, according to the Indian tradition.

Table 1. Seven Chakras vibration modality and the associated colours. As "Vibrating modalities" of the seven chakra are commonly associated with the colour of the rainbow, the chakras are sometimes referred to as a "Rainbow Bridge" connecting heaven and earth (Judith, Wheel of Life).

S. no.	Common name	Physical location	Psychological issues	Associated colour
1	Root	Base of the spine	Physical survival, trust, prosperity, groundedness.	Red
2	Pleasure	Pelvic region, lower abdomen	Pleasure, sexuality, emotions and movement.	Orange
3	Power	Solar plexus, midabdo men	Intention, will, self-esteem.	Yellow
4	Heart	Heart, chest region	Connection, love, self-acceptance.	Green
5	Throat	Throat, neck region	Communication, voice, self-expression.	Bright Blue
6	Brow	Center of lower forehead, "Third Eye"	Intuition, imagination and seeing.	Indigo

7	Crown	Crown of the head	Awareness, spiritual consciousness.	White or Violet

Discusses that there are seven chakras (energy center) in the human body. These major chakras emit along the spine and the head. The heart chakra can be divided into two chakras called Lower anahat and anahat upper anahat. Lower anahat is disturbed by emotional hurt causing, loss of interest in life and upper anahat is affected by lack of confidence by the measure of self-confidence.

Meditation at various chakras helps in self-control, reduces stress, increases feelings of wellbeings (developing and strengthening our moral values) and benefits overall health. It also helps to increase alertness, relaxation and reflection even in "waking" states. Chakra energy can develop our day to day functioning from better to excellent leading worldliness in harmonic development. A number of studies have shown how it affects the (brain) (Chaturvedi, 2015).

Academic achievement is an attained ability or degree of competence in curricular and extracurricular tasks. Students' academic achievements are measured by standardized tests and expressed in grades or units based on norms derived from a wide sampling of pupils' performance and experts' tools. Studies have revealed that even low or moderate levels of stress can interfere with task performance. Cognitive reactions of stress results in the inability to concentrate.

The present study examines whether meditation affects the academic performance of adolescent students in relation to their stress, i.e., whether a meditation module consisting of prayer + meditation + chakra energy + a value orientation program leads to an increase in academic achievements. Two groups of students are taken. The firstly is the experimental group, a group of randomly selected secondary level students will practice the meditation module, daily for about 40 minutes in the mornings before school classes begin. A control group closely mirroring the students in the experimental group will also be selected but will not perform the practice of the daily meditation module. Both the experimental and the control groups will be subjected to battery tests before and after the program to see the differences in achievements in the control -group and the experimental -group. The battery tests consist of a set of standardized question and answer tests used traditionally in such situations and what is unique to this study tool is - measurements using the Meridian Energy Analysis Device

(MEAD). The MEAD is a state-of-the-art electronic device used by practitioners of Traditional Chinese Medicine to find the flow of energy along the chakra energy in the body.

Same method and same device will be used in our research work similar work done by hui chai at Singapore. The unit of "Chakra Energy" is micro ampere for constant voltage and fixed duration. The meridian energy analysis device (MEAD) was used to record the meridian electrical conductance (MEC) values of meridians points. The device is basically an amperometer employing a DC voltage of 12 V with output current of 0-200 uA. Nakatani Y. (1956) Skin electric resistance and ryodoraku. J.-S. Chang, W.-Y. Lin, and H.-P. Liu, (2016). "Acupuncture at SP6 point in lower extremities improved patients' insomnia, which was also shown through ryodoraku electrical measurements," Acupuncture & Electro-Therapeutics Research, vol. 41, no. 2, pp. 79-93.

EMERGENCE AND JUSTIFICATION OF THE STUDY

Educational achievements depend not only on the educational capabilities of students, but also on the efforts and supervision of their teachers such as increased exposure to happenings in sports, movies and other societal offerings especially on television and more specifically on the internet (Example-Blue whale game).

To attract the students and increase their focus on curricular and extracurricular achievements at school, they can be taught yoga and meditation practices and their positive effect on their physical, mental and spiritual energies. These efforts can be more effective and acceptable to the students when they will be told about ancient Indian sages who achieved success of yoga and meditation like Gautam Buddha, Vivekananda, etc, and many other examples of great personalities in Indian history who evoked powers of sensing intuition, decision making, judging, and thinking. Meditation practices has also been proved scientifically as the emergence s of chakra energy through meditation (Jung, 1990).

There has been scientific studies in the past on the effect of various meditation practices on children and young adults with slight disabilities. It was found that the group of people performing yoga and meditation developed IQ, EQ, social adjustment, concentration, focus and relaxation in comparison with control groups who did not practice yoga and meditation.

As Ryff and Singer (1998) aptly point out, "human wellness is at once about the mind and the body and their interconnection" (p.2). Although the implications of the physiological correlates of meditation are

as yet under, it seems likely that some of the changes represent "physiological substrates of flourishing" (Ryff & Singer, 1998). In the past researches the effect of changes in chakra energy of school students performing meditation practices was not correlated was not with their academic achievement and personality improvement. The present researcher has therefore taken up the present study to fill this gap.

Table 2. Researches on Meditation and Chakra Energy in National & International Perspective

S.No.	Year	Name of the Researcher	Research
1	2019	Shine –en chung, et, al.	An application of meridian electrical conductance in the sitting of actuate climatic stork's cross sectional study.
2	2018	Nauert R.	Study: Yoga +Meditation=Better Brain Function, More Energy.
3	2017	Kimberley Luu and Hall P.	Just 25 minutes of yoga, meditation 'boosts brain function, energy'
4	2016	Philip J.	Review of "Chakra Meditation"
5	2016	Kimberley Luu & Peter A. Hall	Examining the Acute Effect of Hatha yoga and Mindfulness Meditation on Executive function and Mood. Mindfulness.
6	2012	Chatruvedi D.K. & Lajwanti	Correlation between energy distribution profile and level of consciousness.
7	2013	Chatruvedi D.K. Jyoti A.K Bhardwaj R	Effect of meditation on chakra energy and hemodynamic parameters.
8	2014	Philo ChrishLousia Cadman & Lea Jennifer	New Energy Geographies: A case study of Yoga, Meditation and Healthfulness.
9	2012	Chaturvedi D.K. Lajwanti &Tasi H.C.	Energy distribution Energy distribution profile influences the level of consciousness,
10	2009	C.W. Leadbeater	The Healthfulness Chakras.
11	2009	Milam J, & Sussman S.	Sitting- Meditation Interventions Among Youth: A Review of Treatment Efficacy.
12	2006	Roger Walash & Shauna L. Shapiro	*"*The meeting of meditative disciplines and western psychology: A mutually enriching dialogue*".*
13	2006	Stream. Vimala, T.D.	Examined the daily stress of college going girls. Method
14	2003	Kiran, R .Mridula, A. & Subbakrishna D.K	Coping a Subjective Wellbeing in Women with Multiple Roles. Method
15	2000	Merier P.	Chakras: Balance Your Body's Energy for Health and Harmony
16	1996	Tsuej Julie J	Scientific Evidence in Support of acupuncher and Meridian Theory
17	1993	S.M. Aditya and A.K Sen	Executive under stress
18	1981	Motovyama & Hiroshi	Theories of the Chakras

These studies suggest that meditation can improve me self-actualization (Alexander, Rainforth, & Gelderlos, 1991); empathy (Lesh, 1970; Shapiro, Schwartz, & Bonner, 1998); sense of coherence and stress- hardiness (Kabat-Zinn& Skilling, 1989; Tate, 1994), happiness (Smith,

Compton, & West, 1995), increased autonomy and autonomy and independence (Penner, Zingle, Dyck, & Truch, 1879); a positive sense of control (Astin, 1997); increased moral maturity (Nidich, Ryncarz, Abrams, Orme- Johnson, & Wallace, 1983): and spirituality (Shapiro et al., 1998). Positive behavioral effects include: heightened perception (visual sensitivity, auditory acuity); improvement in reaction time and responsive motor skill; increased field independence; increased concentration and attention (see Cranson, Orme- Johnson, Gackenbach, Dillbeck, Jones, & Alexander,1991; Dillbeck, Assimakis, & Raimondi, 1986; Lewis, 1978), and some forms of creativity (Cowger & Torrance, 1982).

In the light of the above studies, the present research is intended to investigate the effect of some simple meditation practices on the academic performance of a random group of school students. Two groups of students, one the test group and the second being a control group will be used. Testing will be done using standardized written tests and electrical measurements at various acupuncture points using the Meridian Energy Analysis Device, a state-of-the-art. Electronic device, Mead which is used by Traditional Chinese Medicine practitioners for energy measurements at chakra meditation in the body to determine the energy balance in the body. A study used MEAD found that meditation brought about brain plasticity, and produced a calming and relaxed effect on both serious and casual regular mediators.

STATEMENT OF THE PROBLEM

In line with the above discussion, the present problem can be stated ass

Effect of Meditation on Chakra Energy: A Correlational Study with Respect to Academic Achievement of Secondary School Students.

DEFINITION OF THE TERMS

DEFINITION OF MEDITATION

Meditation has proved to be an essential tool that assists in reducing stress to a great extent. A lot of other constructive changes have also been reported. (Venuturupalli, 2019)

Meditation is a systematic tool of achieving harmony between the physical, mental, intellectual and spiritual personalities of human development. In it a flow of thoughts is focused on a center point using

mind in a natural way. Meditation has a number of positive effects on the physiology and psychology of the human body.

DEFINITION OF CHAKRA ENERGY

Chakras are the energy centers of our body, located vertically at the midline of our body. There are many chakras present in our body, but the basic seven chakras are the crown chakra, the third eye chakra, the throat, the heart, the solar plexus, the sacral, and the root chakra. Each chakra is associated with different energy levels. The level of chakra energy is changed when a person does different activities related to her daily routine. These chakras have different energy levels, and by measuring the energy level of these chakras, we can determine the level of consciousness of our body. The openness and flow of energy through our chakras determine our state of health and balance. (Soni, 2016).

Chakras are energy center located on the midline of our body. The flow of energy through this chakra determines our state of health and balance.

DEFINITION OF ACADEMIC ACHIEVEMENT

Walter W. Cook (1956) has defined achievement as "Required ability to do, capacity to do or tendency to do". This definition suggests that there are different kinds of achievements in the field of motor skills, memorized symbols and statements, understanding mental process and finding and finally in the ability and traits. This concept redefines the narrowing concerned idea of achievements as with knowledge. However, as facts stand today academic

achievements refers to the level of learning in the process of education, the amount of content matter learnt by the students from what he has been taught by virtue of the input labor for studies.

Academic performance or "Academic achievements" is the end result of the efforts put by the students in achievements of their short or long – term educational goals.

RESEARCH QUESTIONS

1. Does meditation affect energy levels of different chakras in human body?
2. Is there any correlation between the chakras energy and academic achievements of the secondary school students?

OBJECTIVES OF THE STUDY

Following objectives have been formulated for the present study:

1. To study the effect of meditation on chakra- energy of the secondary school students.

2. To explore the relation between chakra - energy and academic achievement of the secondary school students.

HYPOTHESES OF THE STUDY

H_0 1. Meditation significantly affects chakra- energy of the secondary school students.

H_0 2. Chakra- energy and academic achievement of the secondary school students are correlated significantly.

DELIMITATION OF THE STUDY

Table 3. Delimitation of the study

Area	Dayalbagh, Agra City
Sample Size& Stream	Student (Girls): 100 (Arts and Science stream)
Age Group	14–16
Education Level	Secondary school students
Meditation type	Transcendental Meditation (TM) technique- (OM meditation)
Duration of Meditation	40 Minutes before the prayer

VARIABLES OF THE STUDY

The variables of the study have been classified as follows:

1. Independent Variable- Meditation
2. Dependent Variable- Chakra- Energy and Academic achievement
3. Control Variable- Age, time of conducting the experiment, place, environment and tests.

METHOD OF THE RESEARCH

Experimental method will be used for conducting the present study. According to John W. Best (2001)," Experimental research is the description and analysis of what will be or what will occur under carefully controlled conditions."

In the present study, the researcher will employ the single group pre-test, post-test experimental method of research, considering the nature and objective of the problem.

DESIGN OF THE STUDY

Two group pre and post design will be used.

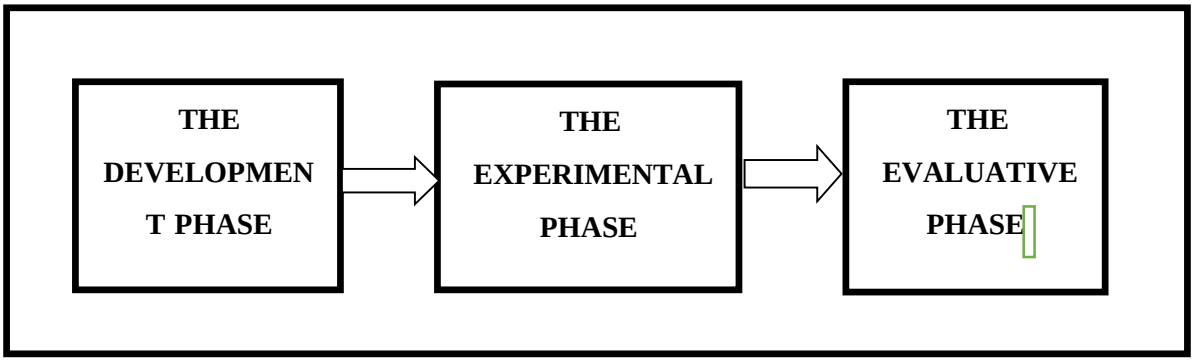
Table 4. Design of the study

S.NO	GROUP	PRE- TEST	TREATMENT	POST- TEST
1.	Single group Experimental design(N=100)	Pre-test of grades 9 & 10 students related to Variables-Academic achievement, meditation and chakra energy.	A group of class 9 & 10 students put to meditation.	Pre-test of class 9 & 10 students- Energy level tested by the MEAD.

PROCESS OF THE STUDY

In the development phase, the researcher will conduct these sub-phases

Table 5. Process of the study



PHASE 1. THE DEVELOPMENT PHASE

In the developmental phase, the researcher will follow these steps-

1. Analysis of the secondary school students.
2. Development the programme of meditation on chakra energy to orient the students of classes 9 & 10.
3. Planning and preparation of practices of meditation, chakra energy and academic achievements.

Phase 2.THE EXPERIMENTAL PHASE

This phase will comprise of the following sub phase:

Pre-test: For this, the researcher will administer the pre-test related to variables-

1. Meditation
2. Chakra - energy

3. Academic achievements

Researcher will orient the students of the experimental group with meditation

Orientation programme.

PHASE 3. THE EVALUATIVE PHASE

Post-test: For this the researcher will administer the pre-test related to variables-

1. Meditation
2. Chakra energy
3. Academic achievements

After the post-test, the researcher will study the results obtained through MEAD, to see the effect of meditation on the chakra energy and further correlate these values with the academic achievement of the students.

SAMPLE OF THE STUDY

1. Purposive sampling will be used for the selection of a secondary level of school and class.

Table 6. Sample of the study

SCHOOL	CLASS	PRE TEST POST TEST EXPERIMENTAL GROUP
One secondary level school will be selected purposively.	9 & 10 class	100 (Students random assignment)

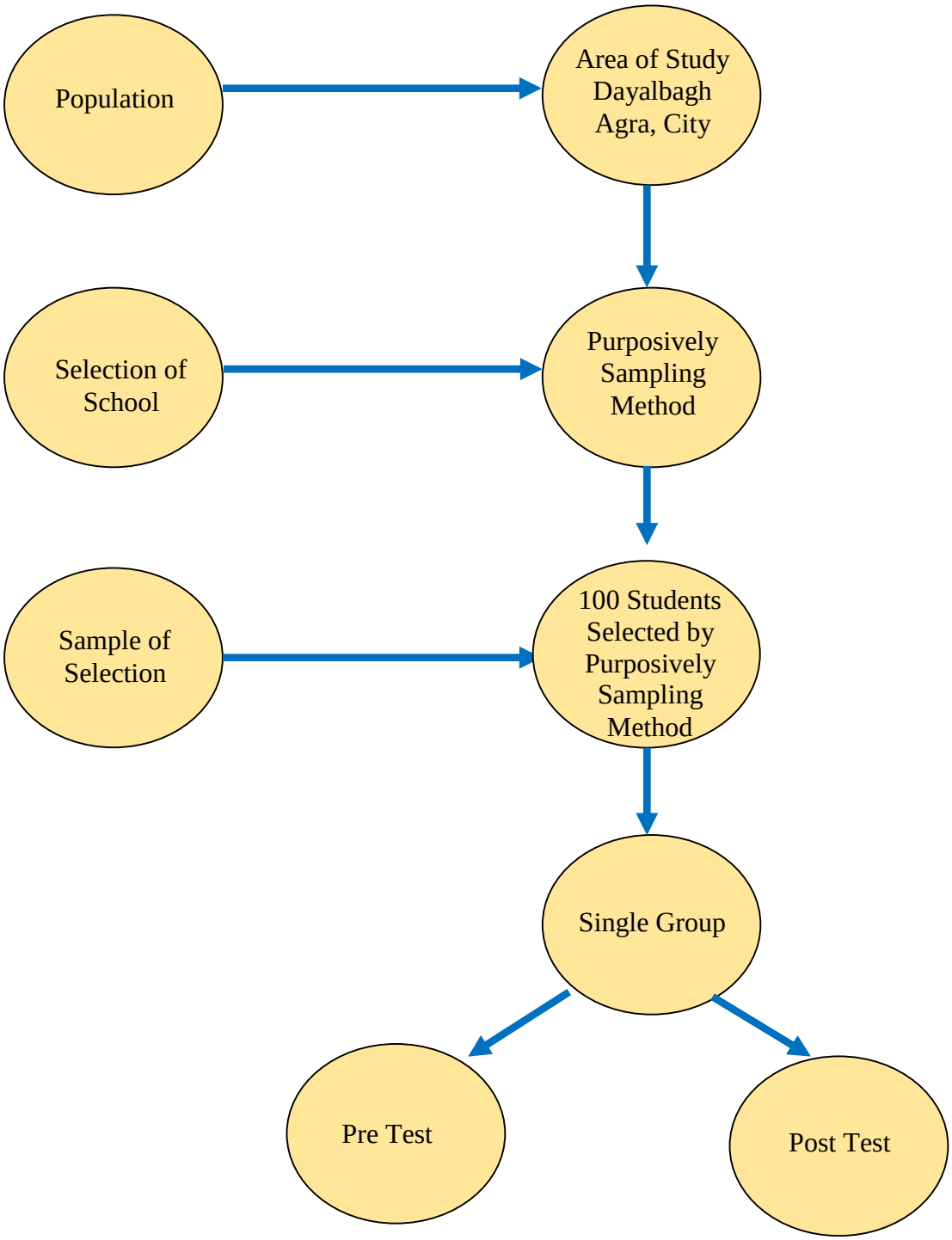


Figure 1. Sample of the study.

RESEARCH DESIGN

Two group pre and post design will be used.

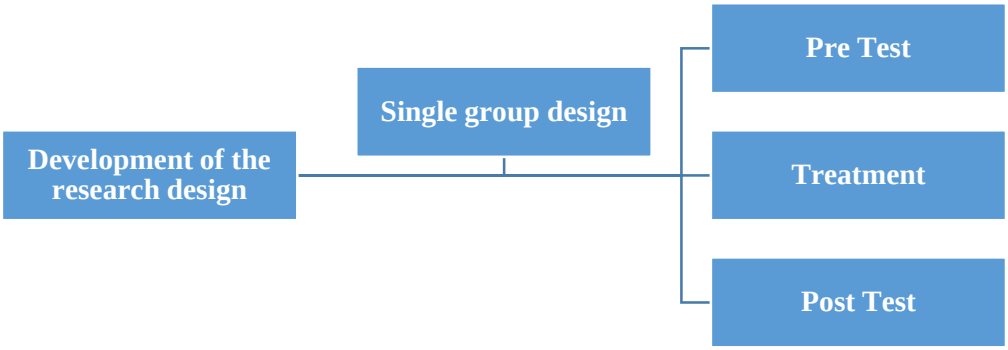


Figure 2. Research Design

TOOLS OF THE STUDY

The following tools will be used for collecting relevant data:

1. Academic achievement test on meditation.
2. MEAD (Meridian Energy Analysis Device) tool by Yoshio Nakatani, (1956).

STATISTICAL TECHNIQUES

The following statistical technique will be used in present study:

DESCRIPTIVE STATISTICS

Descriptive statistics (Mean, Standard Deviation, Graphical representation of data) will be used in order to describe the nature and distribution of the scores obtained on the various tests.

INFERENTIAL STATISTICS

Inferential statistics (T-test, Pearson Product- Moment Correlation Co- efficient) will be used in the present study to test the hypothesis of the study, as well as to draw definite conclusion on the basis of the obtained results.

SIGNIFICANCE OF THE STUDY

As the present era is changing, our lifestyle is changing as well and technical education is also changing. We have now moved to new technical education system from old gurkul education system. Thus, it is clearly noticeable that the way our society is changing is leading a transformation of people's views. The way of education is changing. Today every parent wants to give their children a better and technical education. Every parent wants their child to become an Engineer or a Doctor. They don't even think if their children are really capable of doing so. Whether he or she has interest in that field or not. And the reason behind this is the poverty and excess population because today we have too much poverty that

parents want their child to get engaged in some kind of work as soon as possible so they can manage their livehood and their economy.

According to the present time, lifestyle of people is completely and is dependent on technical aids which have a terrible impact on the mental and physical health of people. It is clearly observed that due to relying too much on technical devices and putting fewer physical efforts is leading to various health issues in people such as heart attack, high blood pressure, high sugar level, depression, and much more. It is also observed that people are investing a lot of time in watching television, playing video games, and using internet. Due to less physical efforts students are lacking in their energy level. Just to sustain and improve the energy level in students they will be asked to do meditation. We will monitor this energy level through the device named 'MEAD Device'. We will spread awareness of energy and this device that measure energy level to the society so that it can be useful for them because energy leads capability to work really plays a vital role in our lifestyle and is very essential for a good health. Thus a researcher gave a thought to research about the energy level and role of energy in the people to improve the lifestyle and to lead a healthy life. According to their research they found that energy level in people is decreasing all the way long. One of the major responsible factors is their nutrition. Just to satisfy the taste they are having less healthy and hygienic food and they are consuming fast food. So, to get rid of this energy deficiency problem we should practice meditation and we must add physical exercise and yoga in daily routine. The great philosopher 'Aristotle' said, 'Healthy body leads to a healthy mind'. According to the research in the field of education. Meditation is very essential because new generation students are facing trouble to retain their knowledge for longer period because of low concentration problem. So, this will help them to build and boost their concentration skill. Thus it is very much needed for the future generation.

REFERENCES

- Alexander, C., Rainforth, M., &Gelderloos, P. (1991). Transcendental meditation, selfactualization and psychological health: A conceptual overview and statistical metaanalysis. Journal of Social Behavior and Personality, 6, 189-249.
- Chatruvedi D.K., Lajwanti. (2014) Correlation between energy distribution profile and level of consciousness, Int JEduc.4 (1): 19p.

- Chaturvedi D.K., Jyoti A.K., Bhardwaj R. (2013) Effect of meditation on chakra energy and hemodynamic parameters.Int J Comp App.; 126(12): 52–9p.
- Chaturvedi D.K., Jyoti A.K., Bhardwaj R. (2013) Effect of meditation on chakra energy and hemodynamic parameters.
- Chaturvedi D.K., Lajwanti, Tsai H.C., et al. (2012). Energy distribution profile influences the level of consciousness, Conference on Consciousness, Toward a Science of
- Consciousness.,Toward a Science of Consciousness. Loews Ventana Canyon, Tucson, Arizona, USA, 240p.
- Chris Philo, Louisa Cadman & Jennifer Lea (13 December 2014) New Energy Geographies: A Case Study of Yoga, Meditation and Healthfulness.
- Cowger, E. L. & Torrance, E. P. (1982). Further examination of the quality changes in creative functioning resulting from meditation (Zazen) training. The Creative Child and Adult Quarterly, 7 (4), 211-217.
- Cranson, R. W., Orme-Johnson, D. W., Gackenbach, J., Dillbeck, M. C., Jones, C.H., &
- Alexander, C.N. (1991). Transcendental meditation and improved performance on intelligence-related measures: A longitudinal study. Personality & Individual Differences, 12 (10), 1105-1116.
- Davidson, R. J., Kabat-Zinn, J., Schumacher, J., Rosenkrantz, M., Muller, D., Santorelli, S. F., Urbanowski, F., & Harrington, A. (2003). Alterations in brain and immune function produced by mindfulness meditation. Psychosomatic Medicine, 65, 564-570.
- Dillbeck, M. C., Assimakis, P. D., & Raimondi, D. (1986). Longitudinal effects of the transcendental meditation and TM-Sidhi program on cognitive ability and cognitive style.
- Perceptual Motor Skills, 62 (3), 731-738.
- Effendi, Shoghi(1973).Directives from the Guardian.HawaiiBahai Publishing Trust.P. 28.
- Effendi, Shoghi(1983). Light of Guidance: A Bahai Reference file. New Delhi: Bahai Publishing Trust. P. 506.ISBN 978- 81-85091-46-4.

- Eugene Taylor (1999). Introduction". The physical and psychological Effects of meditation: A review of Contemporary Research with a Comprehensive Bibliography 1931- 1996: 1- 32.
- Feuerstein, G. (2018). The History of Meditation: A Brief Timeline of Practices and Traditions. Retrieved from: https://get2meditate.com/author/george/page/2/
- Giovanni (15 August 2018)."The History of Meditation (A 5,000 Years Timeline)". Live and Dare. Retrieved 10 November 2019.
- J.-S. Chang, W.-Y.Lin, and H.-P. Liu,(2016). "Acupuncture at SP6 point in lower extremities improved patients' insomnia, which was also shown through ryodoraku electrical measurements," Acupuncture & Electro-Therapeutics Research, vol. 41, no. 2, pp. 79–93.
- Lesh, T. (1970). Zen meditation and the development of empathy in counselors. Journal of Humanistic Psychology, 10 (1), 39-74.
- Lewis, J. (1978). The effects of a group meditation technique upon degree of test anxiety and level of digit-letter retention in high school students. Dissertation Abstracts International, 38 (10-A), 6015-6016.
- Ming-Yen Tasi, Shih- Yu Chen, Chung-Chun Lin. (2017) Theoretical basis application,
- reliability and sample size estimates of a Meridian Energy Analysis Devices for Traditional Chinese Medicine Research. Clinics Sao Paulo ;72(4): 254-257.)
- Murphy, M., Donovan, S., & Taylor, E. (1997). The physical and psychological effects of meditation: A review of contemporary research with a comprehensive bibliography, 2nd ed. Petaluma, CA: Institute of Noetic Sciences.
- Nakatani Y. (1956) Skin electric resistance and ryodoraku.
- Nidich, S. I., Ryncarz, R. A., Abrams, A. I., Orme-Johnson, D. W., Wallace, R. K. (1983). Kohlbergian cosmic perspective responses, EEG coherence, and the TM and TM-Sidhi program. Journal of Moral Education, 12, 166-173.
- Penner, W. J., Zingle, H. W., Dyck, R., Truch, S. (1974). Does an in-depth transcendental meditation course effect change in the personalities of the participants? Western Psychologist, 4, 104-111.

- R. Swamy, (2019). Meditation: Process and Effects: ACR Open Rheumatol; 1 (10): 667- 675. Published online 2019 Nov 11. doi: 10.1002/acr2.11092 PMCID: PMC6917304.
- Roger walsh& Shauna L. Shapiro (2006). “The meeting of meditative disciplines and western psychology: A mutually enriching dialogue”. American Psychologist (Submitted manuscript).61 (3):227-39. Doi:10.1037/0003-066X.61.3.227.
- Ryff, C. D. & Singer, B. (1998). Human health: New directions for the next millennium. Psychological Inquiry, 9 (1), 69-85.
- Shapiro, D. & Walsh, R. (Eds.). (1984). Meditation: Classic and contemporary perspectives. New York: Aldine.
- Shapiro, S. L. & Schwartz, G. E. (1998). Mindfulness in medical education: Fostering the health of physicians and medical practice. Integrative Medicine, 1, 93.
- Shapiro, S. L., Schwartz, G. E. R. & Bonner, G. (1998). The effects of mindfulness-based stress reduction on medical and pre-medical students. Journal of Behavioral Medicine, 21, 581-599.
- Smith, Peter (2000). “Prayer”. A concise encyclopedia of the BahaiFath Oxford: Oneworld Publication. P. 274.ISBN 978-1-85178-184-6.
- Smith, W. P., Compton, W. C., & West, W. B. (1995). Meditation as an adjunct to a happiness enhancement program. Journal of Clinical Psychology, 51 (2), 269-273.
- Tate, D. B. (1994). Mindfulness meditation group training: Effects on medical and psychological symptoms and positive psychological characteristics. Dissertation Abstracts International, 55 (55-B), 2018.
- Yu-Chen Lee, Hui Ping N., Yung-Hsien Chang. (2018). The Development and Application
- Evaluation of Meridian Energy Detection System in Traditional Oriental Medicine: A Preliminary Study.